

Claims

WHAT IS CLAIMED IS:

1. A method of editing layout of a child object associated with a parent object or
5 container displayed on a video display by a computer system, the method comprising:
detecting a layout edit operation for the child object displayed on the video display by the
computer system; and
determining from the child object and the parent whether there exists one or more parameters
associated with one of the child and the parent; and
10 editing the layout of the child object if a parameter limitation exists for the parameter, in
accordance with the one or more parameter limitations.
2. The method of claim 1, wherein the detecting operation is performed via an
abstraction layer.
3. The method of claim 2, wherein the determining operation comprises:
determining a container type for the parent object or container in which the child object is
displayed;
retrieving a set of properties related to the child object to be edited;
5 retrieving a set of properties related to the parent container in which the object is displayed
and
recognizing any limitations that exist within the sets of properties.
4. The method of claim 3, wherein the operation of editing comprises:
determining whether the one or more child limitations includes a maximum dimension; and
limiting adjustment of the dimension of the child to less than or equal to the maximum if the
maximum dimension is present.
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5. The method of claim 3, wherein the editing operation comprises.
determining whether the one or more child limitations includes a functional relationship

between the child and parent; and

retrieving a ReferenceSize if a functional relationship exists; and

5 calculating new layout parameters for the child based on the functional relationship.

6. The method of claim 3, wherein editing the child object comprises modifying one or more properties of the child object.

7. The method of claim 3, wherein editing the child object comprises modifying one or more properties of the parent object or container.

8. A system for editing a layout of a child object displayed within a parent container on a video display comprising:

a processor; and

a memory coupled with and readable by the processor and containing instructions that, when
5 executed by the processor, cause the processor to detect a layout edit operation request for a child object displayed on the video display by the computer system, send an edit operation request via an application program interface to initiate layout editing of the child object, determine whether the child object has one or more parameter limitations, determine whether the parent container has one or more parameter limitations, and edit the child object layout based on the limitations and the
10 received edit operation request.

9. The system of claim 8 further comprising the processor containing instructions, that, when executed by the processor, cause the processor to perform a child object measure helper operation and a child object arrangement helper operation on the child when a layout edit operation request is detected.

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10. The system of claim 8, wherein one or more of the child limitations includes a functional relationship of size between the child and the parent.

11. The system of claim 10, wherein the functional relationship is a proportional relationship between the child and the parent.

12. The system of claim 11, wherein editing the layout of the child object comprises maintaining the proportional relationship between the child and the parent.

13. The system of claim 8, wherein editing the child object comprises modifying one or more layout properties of the parent container.

14. A machine-readable medium encoding a computer program of instructions for editing objects displayed on a video display by a computer system, said computer process comprising:

detecting a layout edit operation for a child object displayed on the video display by the computer system; and

5 determining from the child object and a parent container displayed on the display whether there exists one or more layout parameter limitations associated with one of the child and the parent; and

editing the layout of the child object if a limitation exists, in accordance with the one or more layout parameter limitations.

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15. The machine-readable medium of claim 14, wherein the determining further comprises:

determining a container type for the parent object or container in which the child object is displayed;

5 retrieving a set of layout parameters related to the child object to be edited;

retrieving a set of layout parameters related to the container in which the object is displayed and

recognizing any layout limitations that exist within the sets of layout parameters.

16. The machine-readable medium of claim 14, wherein the editing of the layout of the child object comprises:

determining whether the one or more child layout limitations includes a functional relationship between the child and parent; and

5 retrieving a ReferenceSize if a functional relationship exists; and

calculating new layout parameters for the child based on the functional relationship and the ReferenceSize.

17. The machine-readable medium of claim 14, wherein the detecting operation is performed via an abstraction layer.

18. The machine-readable medium of claim 17, wherein editing the child object further comprises determining whether a layout limitation of the child is a proportional relationship to the parent container and if so, maintaining the proportional relationship between the layout of the child object and the parent container.

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19. The machine-readable medium of claim 17, wherein editing the object comprises modifying one or more properties of the child object in a child measure helper routine in the abstraction layer.

20. The machine-readable medium of claim 19 further comprising modifying one or more properties of the child object in a child arrangement routine in the abstraction layer consistent with one or more limitations in the parent container.